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| PPLICATION NO.           | FILING DATE         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--------------------------|---------------------|----------------------|-------------------------|------------------|--|
| 09/683,531 01/16/2002    |                     | Robert S. Hamilton   | 106472                  | 7733             |  |
| 27074                    | 7590 08/17/2004     |                      | EXAMINER                |                  |  |
|                          | ERRIDGE, PLC.       | NGUYEN, KEVIN M      |                         |                  |  |
| P.O. BOX 199<br>ALEXANDR | 928<br>IA, VA 22320 | ART UNIT             | PAPER NUMBER            |                  |  |
|                          | •                   |                      | 2674                    | 6                |  |
|                          |                     |                      | DATE MAILED: 08/17/2004 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                     | Application N      | lo.                               | Applicant(s)        |        |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------|---------------------|--------|--|--|--|
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                     |                    |                                   | HAMILTON, ROBERT S. |        |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                     | 09/683,531         |                                   |                     |        |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                     | Examiner           |                                   | Art Unit            |        |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                     | Kevin M. Ngu       |                                   | 2674                | Idross |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| 1)⊠                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Responsive to communication(s) filed on 16.                                                                                                                                                                                                                                                         | <i>June 2004</i> . |                                   |                     |        |  |  |  |
| 2a)⊠                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ☐ This action is <b>FINAL</b> . 2b)☐ This action is non-final.                                                                                                                                                                                                                                      |                    |                                   |                     |        |  |  |  |
| 3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                           |                    |                                   |                     |        |  |  |  |
| Dispositi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | on of Claims                                                                                                                                                                                                                                                                                        |                    |                                   |                     |        |  |  |  |
| 4)⊠<br>5)□<br>6)⊠<br>7)□                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4) ☐ Claim(s) 1-18 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-18 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement. |                    |                                   |                     |        |  |  |  |
| Applicati                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | on Papers                                                                                                                                                                                                                                                                                           |                    |                                   |                     |        |  |  |  |
| 9) The specification is objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| Priority u                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ınder 35 U.S.C. § 119                                                                                                                                                                                                                                                                               |                    |                                   |                     |        |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| Attachmen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                     |                    |                                   |                     |        |  |  |  |
| 3) Infor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date                                                                                                                                                                         |                    | Notice of Informal Page 11 Other: |                     | )-152) |  |  |  |

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### **DETAILED ACTION**

1. The amendment filed on 6/16/2004 is entered. The rejections of claims 1-18 are maintained.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al (US 5,745,102) in view of Albert et al (US 6,118,426).

As to claims 1, 10, Block et al teaches a display label for a diskette associated with a method, the display label comprising

A display 410 (fig. 4A), display mechanism could be mounted on a clip-like device or on an adhesive-backed device (fig. 9, col. 11, lines 42-48).

A battery 116 (an energy source, fig. 4A);

Input interface 112 (fig. 4A) or other suitable data transfer interfaces are also contemplated such as other types of physical contracts or non-contact components, optical coupler including an infrared light emitting diode (IR-LED) transmitter (not shown) and a phototransistor (not shown) receiver (not shown) (col. 9, lines 44-49).

The floppy disk drive 210 (a recording/play device, fig. 2A)

Microcontroller 563 (fig. 5C) is detailed of a memory 414 (fig. 4A). Control unit 560 which includes a microcontroller 563 and an internal memory 564 storing the digital

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representation of the filenames to be displayed (col. 8, lines 9-12). The control unit 560 receives the directory data (e.g. data and addresses) in a serial manner, converts it to parallel and stores the information in the internal memory (col. 8, lines 19-22).

A specially-designed floppy disk housing along with additional circuitry added to the personal computer which accesses the floppy disk (e.g., a modified floppy disk drive) to automatically update a programmable, dynamic display means operatively and conveniently located on the floppy disk housing such that it stores and can display a current list of selected filenames stored on the storage device (col. 3, lines 25-32).

Block et al teaches all of the claimed limitations, except for a bitable display device.

Albert teaches encapsulated electrophoretic display including bistability (col. 7, lines 24-27).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute Block's display label including bistable encapsulated electrophoretic display, in view of the teaching in the Albert's reference because this would provide a highly-flexible, reflective display which can be manufactured easily, the display itself can be made inexpensively as taught by Albert et al (col. 2, lines 20-27).

As to claims 2, 11, Albert teaches a transducer (col. 14, line 25), and electric paper (col. 16, lines 4-5).

As to claims 3, 12, Albert teaches a gyricon display is an encapsulated display (col. 14, line 45).

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As to claims 4, 5, 13, 14, Albert teaches a thin film battery (col. 15, line 54), and an ambient energy source (a photo cell, col. 15, line 53).

As to claims 6, 15, Albert teaches data for the display system storing in a memory element of the controller (col. 17, line 17). The memory performs the functions of a write-to function, and a read-from function as claimed.

As to claims 7, 16, Albert teaches the controller 340 looks for this identification number 360 and updates the display 350 with the information on the attached data stream if a match between the transmitted ID code and the stored identification number 360 is made (col. 14, lines 37-40).

As to claims 8, 17, Albert teaches item containing a document cover (col. 15, line 63).

As to claims 9 and 18, Block et al teaches a display label for a diskette associated with a method, the display label comprising

A display 410 (fig. 4A),

A battery 116 (an energy source, fig. 4A);

Input interface 112 (fig. 4A), other suitable data transfer interfaces are also contemplated such as other types of physical contracts or non-contact components, optical coupler including an infrared light emitting diode (IR-LED) transmitter (not shown) and a phototransistor (not shown) receiver (not shown) (col. 9, lines 44-49).

Microcontroller 563 (fig. 5C) is detailed of a memory 414 (fig. 4A). Control unit 560 which includes a microcontroller 563 and an internal memory 564 storing the digital representation of the filenames to be displayed (col. 8, lines 9-12). The control unit 560

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receives the directory data (e.g. data and addresses) in a serial manner, converts it to parallel and stores the information in the internal memory (col. 8, lines 19-22).

A specially-designed floppy disk housing along with additional circuitry added to the personal computer which accesses the floppy disk (e.g., a modified floppy disk drive) to automatically update a programmable, dynamic display means operatively and conveniently located on the floppy disk housing such that it stores and can display a current list of selected filenames stored on the storage device (col. 3, lines 25-32).

Block et al teaches all of the claimed limitations, except for a bitable display device.

Albert teaches encapsulated electrophoretic display including bistability (col. 7, lines 24-27). User configurable pattern electrodes are a plurality of row and column drivers can be integrated to the back plane of the display 404 (fig. 7, col. 15, lines 45-47).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute Block's display label including bistable encapsulated electrophoretic display, in view of the teaching in the Albert's reference because this would provide a highly-flexible, reflective display which can be manufactured easily, the display itself can be made inexpensively as taught by Albert et al (col. 2, lines 20-27).

## Response to Arguments

3. Applicant's arguments filed 06/16/2004 have been fully considered but they are not persuasive.

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In response to applicant's argument that claims 1, 9, 10, 18 recite "an addressable display usable as a label for recording media, the label including an embedded optical data link for bi-directional communication with a recording/play device, and a microcontroller that receives the operating signal generated by the energy source and a signal from the optical data link and provides a control signal to the bi-stable display device so that an image is generated on the label of the recording media, wherein the label is automatically updated."

This argument is not persuasive because Block et al teaches a display label for a diskette associated with a method, the display label comprising

A display 410 (fig. 4A);

A battery 116 (an energy source, fig. 4A);

Input interface 112 (fig. 4A) or other suitable data transfer interfaces are also contemplated such as other types of physical contracts or non-contact components, optical coupler including an infrared light emitting diode (IR-LED) transmitter (not shown) and a phototransistor (not shown) receiver (not shown) (col. 9, lines 44-49).

The floppy disk drive 210 (a recording/play device, fig. 2A).

Microcontroller 563 (fig. 5C) is detailed of a memory 414 (fig. 4A). Control unit 560 which includes a microcontroller 563 and an internal memory 564 storing the digital representation of the filenames to be displayed (col. 8, lines 9-12). The control unit 560 receives the directory data (e.g. data and addresses) in a serial manner, converts it to parallel and stores the information in the internal memory (col. 8, lines 19-22).

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A specially-designed floppy disk housing along with additional circuitry added to the personal computer which accesses the floppy disk (e.g., a modified floppy disk drive) to automatically update a programmable, dynamic display means operatively and conveniently located on the floppy disk housing such that it stores and can display a current list of selected filenames stored on the storage device (col. 3, lines 25-32).

Albert teaches encapsulated electrophoretic display including bistability (col. 7, lines 24-27). User configurable pattern electrodes are a plurality of row and column drivers can be integrated to the back plane of the display 404 (fig. 7, col. 15, lines 45-47).

These arguments are not persuasive because the substitute bistable encapsulated electrophoretic display of Albert for display label of Block meet all of the claimed limitations of claims 1, 9, 10, 18 above.

For these reasons, the rejections based on Block et al and Albert et al have been maintained.

#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

## Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

### or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Kevin M. Nguyen Patent Examiner Art Unit 2674

KN

August 12, 2004

XIAO WU PRIMARY EXAMINER